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Part 1 — WELDING JOURNAL SUBJECT INDEX

Alternatives in Welding Nickel Clad Steel — J. R. Varma and G. C. Miller, 249 to 253, (Apr).
Aluminum Brazing Problems Due to Grain Size — P. Sharples, 164 to 167, (Mar).
Aluminum Heat Exchangers, Ultrasonic Soldering of — J. L. Schuster and R. J. Chilko, 711 to 717, (Oct).
*Aluminum, No. 9 of a Series on Welding — 28 to 30, (Jan).
*Aluminum, No. 10 of a Series on Welding — 114 to 115, (Feb).
*Aluminum, No. 11 of a Series on Welding, 182 to 184, (Mar).
*Aluminum, No. 12 of a Series on Welding — 262 to 264, 272, (Apr).
*Aluminum, No. 13 of a Series on Welding — 362 to 363, (May).
*Aluminum, No. 14 of a Series on Welding — 439 to 440, (June).
Aluminum, Vacuum Brazing of — E. P. Patrick, 159 to 163, (Mar).
*Aluminum Welding, No. 1 of a Series on Quality Control in — 514 to 516, (July).
Aluminum Welding, No. 2 of a Series on Quality Control in — 595 to 597, (Aug).
*Aluminum Welding, No. 3 of a Series on Quality Control in — 808 to 810, (Nov).
*Aluminum Welding, No. 4 of a Series on Quality Control in — 888 to 890, (Dec).
Aluminum Welding with Solid State Power Source, Improved, Lower Cost — F. J. Grist, 348 to 357, (May).
Arc Strikes on High Strength Steels — T. J. Natarajan and R. B. McCauley, 879 to 884, (Dec).
Arc Welding Power Sources and Controls — E. R. Pierre, 575 to 581, (Aug).
*Automatic Stud Welding Speeds Desk Manufacture — 513, (July).
*Automatic Welding Machine Increases Production — 664, (Sept).
*AWS Approves New Process Names — 268 to 269, (Apr).

Backings Come of Age, Weld — R. H. Keith, 422 to 430, (June).
*Brazing Experts Cut Costs — 27, (Jan).
*Brazing, Precision Manufacturing Calls for Precision — L. J. Barthold and F. Metzler, Jr., 179 to 180, (Mar).
Brazing Problems Due to Grain Size, Aluminum — P. Sharples, 164 to 167, (Mar).
*Brazing, Redesigning a Flowmeter Rotor for Furnace — R. Fairbanks, 730 to 731, (Oct).

***C**heck Your Weld Profiles! — 259, (Apr). (See p440 June issue for correction).
Choosing a Welding Process for LNG Piping and Vessels — A. B. Crichton, H. J. Post and H. A. Sosnin, 641 to 646, (Sept).
*Comment on Stress Relief Article — 113, (Feb).
Comparison of Plasma Flame Spray Gases — H. S. Ingham, Jr. and A. J. Fabel, 101 to 105, (Feb).
Composite Welds — N. Kenyon and S. Floreen, 245 to 248, (Apr).
Condensation Soldering — R. C. Pfahl, Jr., J. C. Mollendorf and T. Y. Chu, 22 to 25, (Jan).
*Continuous Hydrogen Furnace Brazing of Aircraft Heat Exchangers — L. B. Lindsay and D. F. Wireman, 737 to 739, (Oct).
*Cutting Saddle Joints in Thin Wall Tubing — 112, (Feb).

Diffusion Bonding: a Look at the Future — P. M. Bartle, 799 to 804, (Nov).

EB Welding Teams Up with NDT Techniques — 97 to 100, (Feb).
*Electroslag Welding Selected for Unusual Building Trusses — 657 to 658, (Sept).
Environment, Welding and — F. C. Saacke, 343 to 347, (May).
Explosion Welding, Methods for Fabricating and Plugging of Tube to Tubesheet Joints by — R. Hardwick, 238 to 244, (Apr).

Fabrication of Large Electric Excavators — R. M. Losee, 493 to 499, (July).
Ferrite Problem — Is It a Tempest in a Teapot?, The — H. C. Campbell, 867 to 871, (Dec).
Filler Metals and Solders — R. E. Beal, 725 to 728, (Oct).
Forced Hot Air Fusing of Solder and Plated Circuits — H. J. Scagnelli, F. J. D'Erchia and A. M. Wittenberg, 718 to 724, (Oct).
Friction Welding, Recent Industrial Developments in — C. R. G. Ellis, 582 to 589, (Aug).

Gases, Comparison of Plasma Flame Spray — H. S. Ingham, Jr. and A. J. Fabel, 101 to 105, (Feb).

Heat Exchanger, Ultrasonic Soldering of Aluminum — J. L. Schuster and R. J. Chilko, 711 to 717, (Oct).
High Strength Steels, Arc Strikes on — T. J. Natarajan and R. B. McCauley, 879 to 884, (Dec).
*Hydraulic Welding Fixture Assures Product Quality — 661 to 662, (Sept).

Improved, Lower Cost Aluminum Welding with Solid State Power Source — F. J. Grist, 348 to 357, (May).
Instruction at the College of San Mateo, Welding — L. DeFreitas, 106 to 110, (Feb).

Job of the Welder, The — H. B. Cary, 11 to 21, (Jan).

LNG Piping and Vessels, Choosing a Welding Process — A. B. Crichton, H. J. Post and H. A. Sosnin, 641 to 646, (Sept).

A Practical Welder and Designer Article

Low Amp Plasma Welding Gets the Heat Right — 112, (Feb).

*Marion Designs a New Welding Shop — 358 to 360, (May).
*Mash Resistance — Seam Welding Speeds Tank Production — 890 to 891, (Dec).
Methods for Fabricating and Plugging of Tube to Tubesheet Joints by Explosion Welding — R. Hardwick, 238 to 244, (Apr).

NDT Techniques, EB Welding Teams Up with — 97 to 100, (Feb).
*A New Development in Automated Paste Soldering — J. J. McManus, 734 to 735, (Oct).
*New Wire Feed System Fulfills Its Promise — 255 to 256, (Apr).
Nickel Clad Steel, Alternatives in Welding — J. R. Varma and G. C. Miller, 249 to 253, (Apr).

*Overhead Welding Equipment Keeps Labor Costs Down — 512, (July).

Piping at the Kennedy Space Center, Welding Vacuum Jacketed — W. E. Clautice, 500 to 509, (July).
Plasma Flame Spray Gases, Comparison of — H. S. Ingham, Jr. and A. J. Fabel, 101 to 105, (Feb).
Power Sources and Controls, Arc Welding — E. R. Pierre, 575 to 581, (Aug).
*Precision Manufacturing Calls for Precision Brazing — L. J. Barthold and F. Metzler, Jr., 179 to 180, (Mar).
*Production Line Scheduling Adapted to Welded Piping Assemblies — 591 to 593, (Aug).

Quality Assurance for Resistance Spot Welding — D. R. Andrews and J. Broomhead, 431 to 435, (June).
*Quality Control in Aluminum Welding, No. 1 of a Series on — 514 to 516, (July).
*Quality Control in Aluminum Welding, No. 2 of a Series on — 595 to 597, (Aug).
*Quality Control in Aluminum Welding, No. 3 of a Series — 808 to 810, (Nov).
*Quality Control in Aluminum Welding, No. 4 of a Series on — 890, (Dec).
Quality Control in Arc Stud Welding — W. A. Baeslack, III, G. Fayer IV, S. Ream and C. E. Jackson, 789 to 798, (Nov).

Recent Industrial Developments in Friction Welding — C. R. G. Ellis, 582 to 589, (Aug).
*Redesigning a Flowmeter Rotor for Furnace Brazing — R. Fairbanks, 730 to 731, (Oct).
Relays, Resistance Welding Precious Metal Contacts for Miniature Spring — L. L. Dankof, 872 to 878, (Dec).
*Repaired Pump Impellers "Better Than New" — 361, (May).
Resistance Spot Welding, Quality Assurance for — D. R. Andrews and J. Broomhead, 431 to 435, (June).
Resistance Welding Precious Metal Contacts for Miniature Wire Spring Relays — L. L. Dankof, 872 to 878, (Dec).
*Robot Welder Is Taught New Jobs — 510-511, (July).
*Robots Weld Auto Body Parts — 111, (Feb).
*RSW Found Useful for Precision — 807, (Nov).
*RW Method of Attaching Thermocouples — R. H. Waskey, Jr., 26 to 27, (Jan).

Shrinkage in Mechanized Welded 16 in. Stainless Pipe — J. C. Downey, D. W. Hood, and D. D. Keiser, 170 to 175, (Mar).
*Six Wire Electroslag System Expands Manufacturing Capability — 364, (May).
*Solder Helps Keep the "Squirt" in Windshield Wipers — 732 to 733, (Oct).
Solder Plated Circuits, Forced Hot Air Fusing of — H. J. Scagnelli, F. J. D'Erchia and A. M. Wittenberg, 718 to 724, (Oct).
*Soldering, A New Development in Automated Paste — J. J. McManus, 734 to 735, (Oct).
Soldering, Condensation — R. C. Pfahl, Jr., J. C. Mollendorf and T. Y. Chu, 22 to 25, (Jan).
*Soldering Reclaims Cavitation Eroded Cylinder Liners — S. K. Bhattacharya, 177 to 178, (Mar).
Solders, Filler Metals and — R. E. Beal, 725 to 728, (Oct).
Solid State Components in Arc Welding Equipment — R. C. Fernicola, 419 to 421, (June).
Solid State Power Source, Improved, Lower Cost Aluminum Welding with — F. J. Grist, 348 to 357, (May).
Stainless Pipe, Shrinkage in Mechanized Welded 16 in. — J. C. Downey, D. W. Hood, and D. D. Keiser, 170 to 175, (Mar).
Stainless Steel Strip Electrodes, Surfacing with — A. Bernstein, A. Backman, M. Areskoug and S. Forsberg, 647 to 655, (Sept).
*Steel Supply Center Doubles Its Oxygen Cutting Capacity — 436, (June).
Strip Electrodes, Surfacing with Stainless Steel — A. Bernstein, A. Backman, M. Areskoug and S. Forsberg, 647 to 655, (Sept).
*Stud Welding Cuts Cost of New Truck Braking System — 663, (Sept).
Stud Welding, Quality Control in Arc — W. A. Baeslack III, G. Fayer IV, S. Ream, and C. E. Jackson, 789 to 798, (Nov).
*Surfacing Reduces Major Overhauls of Riverboats — 594, (Aug).
Surfacing with Stainless Steel Strip Electrodes — A. Bernstein, A. Backman, M. Areskoug and S. Forsberg, 647 to 655, (Sept).

*Thermal Spraying Reclaims Critical Process Equipment — 437 to 438, (June).
*Thermocouples, RW Method of Attaching — R. H. Waskey, Jr., 26 to 27, (Jan).
Tube to Tubesheet Joints by Explosion Welding, Methods for Fabricating and Plugging of — R. Hardwick, 238 to 244, (Apr).

Ultrasonic Soldering of Aluminum Heat Exchangers — J. L. Schuster and R. J. Chilko, 711 to 717, (Oct).

Vacuum Brazing of Aluminum — E. P. Patrick, 159 to 163, (Mar).
*VICA Skill Olympics, Young Welders Compete — E. G. Hornberger, 806, (Nov).

*Weldable HSLA Steel — A New Trend in Trailers? 176, (Mar).
Weld Backings Come of Age — R. H. Keith, 422 to 430, (June).
Welder, The Job of the — H. B. Cary, 11 to 21, (Jan).
Welding and Environment — F. C. Saacke, 343 to 347, (May).
Welding Instruction at the College of San Mateo — L. De Freitas, 106 to 110, (Feb).
Welding Process for LNG Piping and Vessels, Choosing a —A. B. Crichton, H. J. Post and H. A. Sosnin, 641 to 646, (Sept).
*Welding Saves Drydock Time for Damaged Ship — 887, (Dec).
Welding Vacuum Jacketed Piping at the Kennedy Space Center — W. E. Clautice, 500 to 509, (July).

*Young Welders Compete in VICA Skill Olympics — E. G. Hornberger, 806, (Nov).

A Practical Welder and Designer Article

Part 1 — AUTHOR INDEX

Andrews, D. R. and Broomhead, J. — Quality Assurance for Resistance Spot Welding, 431 to 435, (June).
Areskoug, M., Forsberg, S., Bernstein, A. and Backman, A. — Surfacing with Stainless Steel Strip Electrodes, 647 to 655, (Sept).

Backman, A., Areskoug, M., Forsberg, S. and Bernstein, A. — Surfacing with Stainless Steel Strip Electrodes, 647-655, (Sept).
Baeslack III, W.A., Fayer IV, G., Ream, S. and Jackson, C. E. — Quality Control in Arc Stud Welding, 789 to 798, (Nov).
Barthold, L. J. and Metzler, F., Jr. — Precision Manufacturing Calls for Precision Brazing, 179 to 180, (Mar).
Bartle, P. M. — Diffusion Bonding: a Look at the Future, 799 to 804, (Nov).
Beal, R. E. — Filler Metals and Solders, 725 to 728, (Oct).
Bernstein, A., Backman, A., Areskoug, M. and Forsberg, S. — Surfacing with Stainless Steel Strip Electrodes, 647 to 655, (Sept).
Bhattacharya, S. K. — Soldering Reclaims Cavitation Eroded Cylinder Liners, 177 to 178, (Mar).
Broomhead, J. and Andrews, D. R. — Quality Assurance for Resistance Spot Welding, 431 to 435, (June).

Campbell, H. C. — The Ferrite Problem — Is It a Tempest in a Teapot?, 867 to 871, (Dec).
Cary, H. B. — The Job of the Welder, 11 to 21, (Jan).
Chilko, R. J. and Schuster, J. L. — Ultrasonic Soldering of Aluminum Heat Exchangers, 711 to 717, (Oct).
Chu, T. Y., Pfahl, R. C., Jr., Mollendorf, J. C. — Condensation Soldering, 22 to 25, (Jan).
Clautice, W. E. — Welding Vacuum Jacketed Piping at the Kennedy Space Center, 500 to 509, (July).
Crichton, A. B., Post, H.J. and Sosin H. A. — Choosing a Welding Process for LNG Piping and Vessels, 641 to 646, (Sept).

Dankof, L. L. — Resistance Welding Precious Metal Contacts for Miniature Wire Spring Relays, 872 to 878, (Dec).
DeFreitas, L. — Welding Instruction at the College of San Mateo, 106 to 110, (Feb).
D'Erchia, F. J., Wittenberg, A. M. and Scagnelli, H. J. — Forced Hot Air Fusing of Plated Circuits, 718 to 724, (Oct).
Downey, J. C., Hood, D. W. and Keiser, D. D. — Shrinkage in Mechanized Welded 16 in. Stainless Pipe, 170 to 175, (Mar).

Ellis, C. R. G. — Recent Industrial Developments in Friction Welding, 582 to 589, (Aug).

Fabel, A. J. and Ingham, H. S., Jr. — Comparison of Plasma Flame Spray Gases, 101 to 105, (Feb).
Fairbanks, R. — Redesigning a Flowmeter Rotor for Furnace Brazing, 730 to 731, (Oct).
Fayer IV, G., Ream, S., Jackson, C. E. and Baeslack III, W. A. — Quality Control in Arc Stud Welding, 789 to 798, (Nov).
Fernicola, R. C. — Solid State Components in Arc Welding Equipment, 419 to 421, (June).
Floreen, S. and Kenyon, N. — Composite Welds, 245 to 248, (Apr).
Forsberg, S., Bernstein, A., Backman, A. and Areskoug, M. — Surfacing with Stainless Steel Strip Electrodes, 647 to 655, (Sept).

Grist, F. J. — Improved, Lower Cost Aluminum Welding with Solid State Power Source, 348 to 357, (May).

Hardwick, R. — Methods for Fabricating and Plugging of Tube to Tubesheet Joints by Explosion Welding, 238 to 244, (Apr).
Hood, D. W., Keiser, D. D. and Downey, J. C. — Shrinkage in Mechanized Welded 16 in. Stainless Pipe, 170 to 175, (Mar).
Hornberger, E. G. — Young Welders Compete in VICA Skill Olymics, 806, (Nov).

Ingham, H. S., Jr. and Fabel, A. J. — Comparison of Plasma Flame Spray Gases, 101 to 105, (Feb).

Jackson, C. E.,Baeslack III, W. A., Ream, S. and Fayer IV, G. — Quality Control in Arc Stud Welding, 789 to 798, (Nov).

Keiser, D. D., Downey, J. C. and Hood, D. W. — Shrinkage in Mechanized Welded 16 in. Stainless Pipe, 170 to 175, (Mar).
Keith, R. H. — Weld Backings Come of Age, 422 to 430, (June).
Kenyon, N. and Floreen, S. — Composite Welds, 245 to 248, (Apr).

Lindsay, L. B. and Wireman, D. F. — Continuous Hydrogen Furnace Brazing of Aircraft Heat Exchangers, 737 to 739, (Oct).
Losee, R. M. — Fabrication of Large Electric Excavators, 493 to 499, (July).

McCauley, R. B. and Natarajan, T. J. — Arc Strikes on High Strength Steels, 879 to 884, (Dec).
McManus, J. J. — A New Development in Automated Paste Soldering, 734 to 735, (Oct).
Metzler, F. Jr. and Barthold, L. J. — Precision Manufacturing Calls for Precision Brazing, 179 to 180, (Mar).
Miller, G. C. and Varma, J. R. — Alternatives in Welding Nickel Clad Steel, 249 to 253, (Apr).
Mollendorf, J. C., Pfahl, R. C., Jr., and Chu, T. Y. — Condensation Soldering, 22 to 25, (Jan).

Natarajan, T. J. and McCauley, R. B. — Arc Strikes on High Strength Steels, 879 to 884, (Dec).

Patrick, E. P. — Vacuum Brazing of Aluminum, 159 to 163, (Mar).
Pfahl, R. C., Jr., Mollendorf, J. C. and Chu, T. Y. — Condensation Soldering, 22 to 25, (Jan).
Pierre, E. R. — Arc Welding Power Sources and Controls, 575 to 581, (Aug).
Post, H. J., Sosin, H. A. and Crichton, A. B. — Choosing a Welding Process for LNG Piping and Vessels, 641 to 646, (Sept).

Ream, S., Jackson, C. E., Baeslack, III, W. A. and Fayer IV, G. — Quality Control in Arc Stud Welding, 789 to 798, (Nov).

Saacke, F. C. — Welding and Environment, 343 to 347, (May).
Scagnelli, H. J., D'Erchia, F. J. and Wittenberg, A. M. — Forced Hot air Fusing of Solder Plated Circuits, 718 to 724, (Oct).
Schuster, J. L. and Chilko, R. J. — Ultrasonic Soldering of Aluminum Heat Exchangers, 711 to 717, (Oct).
Sharples, P. — Aluminum Brazing Problems Due to Grain Size, 164 to 167, (Mar).
Sosnin, H. A., Crichton, A. B and Post, H. J. — Choosing a Welding Process for LNG Piping and Vessels, 641 to 646, (Sept).

Varma, J. R. and Miller, G. C. — Alternatives in Welding Nickel Clad Steel, 249 to 253, (Apr).

Waskey, R. H., Jr. — RW Method of Attaching Thermocouples, 26 to 27, (Jan).
Wireman, D. F. and Lindsay, L. B. — Continuous Hydrogen Furnace Brazing of Aircraft Heat Exchangers, 737 to 739, (Oct).

Wittenberg, A. M., Scagnelli, H. J. and D'Erchia, F. J. — Forced Hot Air Fusing of Solder Plated Circuits, 718 to 724, (Oct).

Part 2 — WELDING RESEARCH SUPPLEMENT

SUBJECT INDEX

Adams Lecture: The Uses of Welded Materials in Nuclear Power Engineering, 1975 — R. W. Nichols, 417-s to 432-s, (Dec).
Alloy 600 Welding Parameters, Investigation of — S. S. Glickstein, E. Friedman and W. Yeniscavich, 113-s to 122-s, (Apr). (See p 233-s July issue for corrections).
Alloys in Thin Sheet Form, Weldability Studies on High Performance — S. J. Matthews, 281-s to 287-s, (Sept).
Aluminum Alloy Butt Welded Joints, Anisotropy of Fatigue Crack Propagation in — S. M. El-Soudani and R. M. Pelloux, 144-s to 152-s, (May).
Aluminum Alloy Welds, The Effect of Porosity on 5086-H116 — R. F. Ashton, R. P. Wesley and C. R. Dixon, 95-s to 98-s, (Mar).
Analysis of Atmospheric Electron Beam Welding — J. H. Fink, 137-s to 143-s, 152-s, 153-s, (May).
Anisotropy of Fatigue Crack Propagation in Aluminum Alloy Butt Welded Joints — S. M. El-Soudani and R. M. Pelloux, 144-s to 152-s, (May).
Arc, Diagnostic Studies of the GTAW, Part I — Observational Studies — C. B. Shaw, Jr., 33-s to 44-s, (Feb).
Arc, Diagnostic Studies of the GTAW, Part 2 — Mathematical Models — C. B. Shaw, Jr., 81-s to 86-s, (Mar).
Austenitic Stainless Steel, Ferrite-Fissuring Relationship in — C. D. Lundin, W. T. DeLong and D. F. Spond, 241-s to 246-s, (Aug).
Austenitic Stainless Steel, Weldability of High N, High Mn — J. A. Brooks, 189-s to 195-s, (June).

Boron Content on Carbon Steel Welds, Effect of — J. H. Devletian and R. W. Heine, 45-s to 53-s, (Feb).
Brazed and Soldered Joints, Shear Strength of — G. S. A. Shawki and A. A. S. El-Sabbagh, 276-s to 279-s, (Aug).
Brazed Joints, Cracking Susceptibility and Microstructure of Ni-Cr20-Ti-Al — U. Drauglates, B. Wielage and K.-H. Hartman, 344-s to 346-s, (Oct).
Brazing Defects and Brazing Conditions, Relationships Among — D. E. Schillinger and H. J. Addison, Jr., 321-s to 329-s, (Oct).
Brazing, Hydrogen Embrittlement of Tough Pitch Copper by — E. Belkin and P. K. Nagata, 54-s to 62-s, (Feb).
Brazing of Damage Tolerant Titanium Structures, Low Temperature Large-Area — R. R. Wells, 348-s to 356-s, (Oct).
Brazing of Stainless Steel Heat Exchangers for Gas Turbine Applications — I. Amato, P. G. Cappelli and G. Fenoglio, 338-s to 343-s, (Oct).
Bronze to a Titanium Alloy, Diffusion Welding of Commercial — F. J. Zanner and R. W. Fisher, 105-s to 112-s, (Apr).

Chemical Composition on Mild Steel Weld Metal Notch Toughness, Influence of — G. den Ouden, J. G. Verhagen and G. W. Tichelaar, 87-s to 94-s, (Mar).
C-Mn Steels, Effect of Aluminum on HAZ Cold Cracking in — W. P. Campbell, 154-s to 161-s, (May).
Computation of Temperatures in Actual Weld Designs — Z. Paley and P. D. Hibbert, 385-s to 392-s, (Nov).
Copper by Brazing, Hydrogen Embrittlement of Tough Pitch — E. Belkin and P. K. Nagata, 54-s to 62-s, (Feb).
Crack Susceptibility of Soldered Joints, Effect of Low Frequency Thermal Cycling on the — E. R. Bangs and R. E. Beal, 377-s to 383-s, (Oct).
Cracking in Restrained EB Welds in Carbon and Low Alloy Steels — M. J. Bibby, J. A. Goldak and G. Burbidge, 253-s to 258-s, (Aug).
Cracking Resistance, Weld Metal Implant Test Ranks Cr-Mo Hydrogen — P. H. M. Hart and E. Watkinson, 288-s to 295-s, (Sept).
Cracking Susceptibility and Microstructure of Ni-Cr20-Ti-Al Brazed Joints — U. Draugelates, B. Wielage and K.-H. Hartman, 344-s to 346-s, (Oct).

Diagnostic Studies of the GTAW Arc, Part I — Observational Studies — C. B. Shaw, Jr., 33-s to 44-s, (Feb).
Diagnostic Studies of the GTAW Arc, Part 2 — Mathematical Models — C. B. Shaw, Jr., 81-s to 86-s, (Mar).
Diffusion Welding of Commercial Bronze to a Titanium Alloy — F. J. Zanner and R. W. Fisher, 105-s to 112-s, (Apr).
Dynamic Fracture Instability in Welded 17-7PH Type Steel — B. Z. Weiss, H. D. Steffens, K. Seifert and E. S. Staskewitsch, 216-s to 225-s, (July).

EB Welds in Carbon and Low Alloy Steels, Cracking in Restrained — M. J. Bibby, J. A. Goldak and G. Burbidge, 253-s to 258-s, (Aug).
Effect of Aluminum on HAZ Cold Cracking in C-Mn Steels — W. P. Campbell, 154-s to 161-s, (May).
Effect of Boron Content on Carbon Steel Welds — J. H. Devletian and R. W. Heine, 45-s to 53-s, (Feb).
Effect of Cb on HAZ Ductility in Constructional HT Steels — N. E. Hannerz, 162-s to 168-s, (May).
Effect of Low Frequency Thermal Cycling on the Crack Susceptibility of Soldered Joints — E. R. Bangs and R. E. Beal, 377-s to 383-s, (Oct).
Effect of Porosity on 5086-H116 Aluminum Alloy Welds, The — R. F. Ashton, R. P. Wesley and C. R. Dixon, 95-s to 98-s, (Mar).
Effect of Porosity on Elevated Temperature Fatigue Properties of 2-1/4Cr-1Mo Steel Weldments — R. A. Buchanan and D. M. Young, 296-s to 301-s, (Sept).
Effect of Sulfur on Through-Thickness Properties of C-Mn Steel Plates — G. J. Spaeder, 196-s to 200-s, (June).
Effects of Notch Acuity and Side Grooving on Fracture Toughness, Part I — Impact Loading — E. Smith and B. M. Patchett, 169-s to 177-s, (June).
Effects of Notch Acuity and Side Grooving on Fracture Toughness, Part II — Slow Bend — E. Smith and B. M. Patchett, 226-s to 233-s, (July).
Electron Beam Welding, Analysis of Atmospheric — J. H. Fink, 137-s to 143-s, 152-s, 153-s, (May).
Electroslag Welding of High Nickel Alloys — N. Kenyon, G. A. Redfern and R. R. Richardson, 235-s to 239-s, (July).
Elevated Temperature Fatigue of Pressure Vessel Steels — A. E. Pense and R. D. Stout, 247-s to 252-s, (Aug).

Elevated Temperature Weldment Behavior as Related to Nuclear Design Criteria — R. T. King, D. A. Canonico and C. R. Brinkman, 265-s to 275-s, (Aug).
Embrittlement in Weld Strain-Affected Zone in Carbon Steel — T. Toyooka and M. Watanabe, 393-s to 400-s, (Nov).
Evaluation of Post-Solder Flux Removal — J. Brous, 444-s to 448-s, (Dec).

Fatigue Crack Propagation in Aluminum Alloy Butt Welded Joints, Anisotropy of — S. M. El-Soudani and R. M. Pelloux, 144-s to 152-s, (May).
Fatigue of Pressure Vessel Steels, Elevated Temperature — A. W. Pense and R. D. Stout, 247-s to 252-s, (Aug).
Fatigue Properties of 2-1/4Cr-1Mo Steel Weldments, Effect of Porosity on Elevated Temperature Fatigue — R. A. Buchanan, D. M. Young, 296-s to 301-s, (Sept).
Ferrite-Fissuring Relationship in Austenitic Stainless Steel Weld Metals — C. D. Lundin, W. T. DeLong and D. F. Spond, 241-s to 246-s, (Aug).
Flux, Performance of the $MnO-SiO_2-CaO$ System as a Welding — K. P. Ferrera and D. L. Olson, 211-s to 215-s, (July).
Flux Removal, Evaluation of Post-Solder — J. Brous, 444-s to 448-s, (Dec).
Flux, Substrate and Solder Composition on Solder Wetting, Influence of — J. F. Shipley, 357-s to 362-s, (Oct).
Fracture Instability in Welded 17-7PH Type Steel, Dynamic — B. Z. Weiss, H. D. Steffens, K. Seifert and E. S. Staskewitsch, 216-s to 225-s, (July).
Fracture Toughness, Effects of Notch Acuity and Side Grooving on, Part I — Impact Loading — E. Smith and B. M. Patchett, 169-s to 177-s, (June).
Fracture Toughness, Effects of Notch Acuity and Side Grooving on, Part II — Slow Bend — E. Smith and B. M. Patchett, 226-s to 233-s, (July).
Fume Generation in Arc Welding Processes, Particulate — R. F. Heile and D. C. Hill, 201-s to 210-s, (July).
Fundamental Research on Underwater Welding — R. T. Brown and K. Masubuchi, 178-s to 188-s, (June).

GTAW Process, Weld Thermal Efficiency of the — R. W. Niles and C. E. Jackson, 25-s to 32-s, (Jan).

HAZ Cold Cracking in C-Mn Steels, Effect of Aluminum on — W. P. Campbell, 154-s to 161-s, (May).
HAZ Ductility in Constructional HT Steels, Effect of Cb on — N. E. Hannerz, 162-s to 168-s, (May).
Heat Exchangers for Gas Turbine Applications, Brazing of Stainless Steel — I. Amato, P. G. Cappelli and G. Fenoglio, 338-s to 343-s, (Oct).
Heat Transfer in Plasma-Arc Welding — J. C. Metcalfe and M. B. C. Quigley, 99-s to 103-s, (Mar).
High Strain Rate Tensile Properties of Type 308 SMA Weld Metal — J. M. Steichen and A. L. Ward, 130-s to 135-s, (Apr).
Hot Isostatic Pressure Welding Parameters, A Method for Specifying — W. A. Bryant, 433-s to 435-s, (Dec).
HT Steels, Effect of Cb on HAZ Ductility in Constructional — N. E. Hannerz, 162-s to 168-s, (May).
Hydrogen Embrittlement of Tough Pitch Copper by Brazing — E. Belkin and P. K. Nagata, 54-s to 62-s, (Feb).
Hydrostatic Model of Solder Fillets, A — T. Y. Chu, 16-s to 24-s, (Jan).

Implant Test Ranks Cr-Mo Hydrogen Cracking Resistance — P. H. M. Hart and E. Watkinson, 288-s to 295-s, (Sept).
Influence of Chemical Composition on Mild Steel Weld Metal Notch Toughness — G. den Ouden, J. G. Verhagen and G. W. Tichelaar, 87-s to 94-s, (Mar).
Influence of Flux, Substrate and Solder Composition on Solder Wetting — J. F. Shipley, 357-s to 362-s, (Oct).
Investigation of Alloy 600 Welding Parameters — S. S. Glickstein, E. Friedman and W. Yeniscavich, 113-s to 122-s, (Apr). (See p 233-s July issue for corrections).
Irradiation Effects on Mechanical Properties of an SMAW Deposited Type 308 Stainless Steel — A. L. Ward, 259-s to 264-s, (Aug).

Joint Strength of Heavy Plates with Lower Strength Weld Metal — K. Satoh and M. Toyoda, 311-s to 319-s, (Sept).
Joints, Shear Strength of Brazed and Soldered — G. S. A. Shawki and A. A. S. El-Sabbagh, 276-s to 279-s, (Aug).

Keyhole Stability in Plasma Arc Welding — J. C. Metcalfe and M. B. C. Quigley, 401-s to 404-s, (Nov).

Lead Alloys for High Temperature Soldering of Magnet Wire — W. G. Bader, 370-s to 376-s, (Oct).
Low Temperature Large-Area Brazing of Damage Tolerant Titanium Structures — R. R. Wells, 348-s to 356-s, (Oct).

Materials in Nuclear Power Engineering, 1975 Adams Lecture — R. W. Nichols, 417-s to 432-s, (Dec).
Mechanical Properties of an SMAW Deposited Type 308 Stainless Steel, Irradiation Effects on, — A. L. Ward, 259-s to 264-s, (Aug).
Mechanism of Solid State Pressure Welding — H. A. Mohamed and J. Washburn, 302-s to 310-s, (Sept).
Mechanisms of Spreading and Oxide Displacement by BCuP-2 Brazing Filler Metal — J. F. Rasmussen, D. L. Klarstrom and S. Weiss, 330-s to 337-s, (Oct).
Method for Specifying Hot Isostatic Pressure Welding Parameters, A — W. A. Bryant, 433-s to 435-s, (Dec).
Mn-Mo- Cb Line Pipe Steels, Properties of Welds in Low Carbon — J. M. Sawhill, Jr. and T. Wada, 1-s to 11-s, (Jan).

New Diagram for the Application of Welding Theories, A — G. H. Harth and W. C. Leslie, 124-s to 128-s, (Apr).
Nickel Alloys, Electroslag Welding of High — N. Kenyon, G. A. Redfern and R. R. Richardson, 235-s to 239-s, (July).
Nitrogen in the Welding of Austenitic Stainless Steel, Purging with — C. V. Shirwaikar and G. P. Reddy, 12-s to 15-s, (Jan).
Nuclear Design Criteria, Elevated Temperature Weldment Behavior as Related to — R. T. King, D. A. Canonico and C. R. Brinkman, 265-s to 275-s, (Aug).
Nuclear Power Engineering, The Uses of Welded Materials in, 1975 Adams Lecture — R. W. Nichols, 417-s to 432-s, (Dec).

Particulate Fume Generation in Arc Welding Processes — R. F. Heile and D. C. Hill, 201-s to 210-s, (July).
Performance of the $MnO-SiO_2-CaO$ System as a Welding Flux — K. P. Ferrera and D. L. Olson, 211-s to 215-s, (July).
Pipelines, Toward Better Standards for Field Welding of Gas — R. H. Lumb and G. D. Fearnehough, 63-s to 71-s, (Feb).
Plasma-Arc Welding, Heat Transfer in — J. C. Metcalfe and M. B. C. Quigley, 99-s to 103-s, (Mar).
Plasma Arc Welding, Keyhole Stability in — J. C. Metcalfe and M. B. C. Quigley, 401-s to 404-s, (Nov).
Porosity on 5086-H116 Aluminum Alloy Welds, The Effect of — R. F. Ashton, R. P. Wesley and C. R. Dixon, 95-s to 98-s, (Mar).
Porosity on Elevated Temperature Fatigue Properties of

2-1/4Cr-1Mo Steel Weldments, Effect of — R. A. Buchanan and D. M. Young, 296-s to 301-s, (Sept).
Pressure Welding, Mechanism of Solid State — H. A. Mohamed and J. Washburn, 302-s to 310-s, (Sept).
Pressure Welding Parameters, A Method for Specifying Hot Isostatic — W. A. Bryant, 433-s to 435-s, (Dec).
Properties of Welds in Low Carbon Mn-Mo-Cb Line Pipe Steels — J. M. Sawhill, Jr. and T. Wada, 1-s to 11-s, (Jan).
Purging with Nitrogen in the Welding of Austenitic Stainless Steel — C. V. Shirwaikar and G. P. Reddy, 12-s to 15-s, (Jan).

Relationships Among Brazing Defects and Brazing Conditions — D. E. Schillinger and H. J. Addison, Jr., 321-s to 329-s, (Oct).
Reliability of Soldered Connections in Single Ended Circuit Components — M. Kobayashi, 363-s to 369-s, (Oct).
Repair of Rotating Air-Sealing Components for Gas Turbine Engines — J. W. Lee, 409-s to 415-s, (Nov).
Resistance Spot Welding of High Contact-Resistance Surfaces for Weldbonding — K. C. Wu, 436-s to 443-s, (Dec).

Shear Strength of Brazed and Soldered Joints — G. S. A. Shawki and A. A. S. El-Sabbagh, 276-s to 279-s, (Aug).
Solder Composition on Solder Wetting, Influence of Flux, Substrate and — J. F. Shipley, 357-s to 362-s, (Oct).
Solder Fillets, A Hydrostatic Model of — T. Y. Chu, 16-s to 24-s, (Jan).
Soldered Connections in Single Ended Circuit Components, Reliability of — M. Kobayashi, 363-s to 369-s, (Oct).
Soldered Joints, Shear Strength of Brazed and — G. S. A. Shawki and A. A. S. El-Sabbagh, 276-s to 279-s, (Aug).
Soldering of Magnet Wire, Lead Alloys for High Temperature — W. G. Bader, 370-s to 376-s, (Oct).
Spreading and Oxide Displacement by BCup-2 Brazing Filler Metal, Mechanisms of — J. F. Rasmussen, D. L. Klarstrom and S. Weiss, 330-s to 337-s, (Oct).
Stainless Heat Exchangers for Gas Turbine Applications, Brazing of — I. Amato, P. G. Cappelli and G. Fenoglio, 338-s to 343-s, (Oct).
Stainless Steel, Irradiation Effects on Mechanical Properties of an SMAW Deposited Type 308 — A. L. Ward, 259-s to 264-s, (Aug).
Stainless Steel, Purging with Nitrogen in the Welding of Austenitic — C. V. Shirwaikar and G. P. Reddy, 12-s to 15-s, (Jan).
Stainless Steel Weld Metals, Ferrite — Fissuring Relationship in Austenitic — C. D. Lundin, W. T. DeLong and D. F. Spond, 241-s to 246-s, (Aug).
Standards for Field Welding of Gas Pipelines, Toward Better — R. H. Lumb and G. D. Fearnehough, 63-s to 71-s, (Feb).
Strain-Affected Zone in Carbon Steel, Embrittlement in Weld — T. Toyooka and M. Watanabe, 393-s to 400-s, (Nov).
Sulfur on Through-Thickness Properties of C-Mn Steel Plates, Effect of — G. J. Spaeder, 196-s to 200-s, (June).

Temperatures in Actual Weld Designs, Computation of — Z. Paley and P. D. Hibbert, 385-s to 392-s, (Nov).
Tensile Properties of Type 308 SMA Weld Metal, High Strain Rate — J. M. Steichen and A. L. Ward, 130-s to 135-s, (Apr).
Titanium Alloy, Diffusion Welding of Commercial Bronze to a — F. J. Zanner and R. W. Risher, 105-s to 112-s, (Apr).
Titanium Alloy, Welding of an Advanced High Strength — M. A. Greenfield and D. S. Duvall, 73-s to 80-s, (Mar).
Titanium Structures, Low Temperature Large-Area Brazing of Damage Tolerant — R. R. Wells, 348-s to 356-s, (Oct).
Toward Better Standards for Field Welding of Gas Pipelines — R. H. Lumb and G. D. Fearnehough, 63-s to 71-s, (Feb).
Tungsten, Weldability of Three Forms of Chemically Vapor Deposited — W. A. Bryant and R. E. Gold, 405-s to 408-s, (Nov).
Turbine Engines, Repair of Rotating Air-Sealing Components for Gas — J. W. Lee, 409-s to 415-s, (Nov).
Type 308 SMA Weld Metal, High Strain Rate Tensile Properties of — J. M. Steichen and A. L. Ward, 130-s to 135-s, (Apr).

Underwater Welding, Fundamental Research on — R. T. Brown and K. Masubuchi, 178-s to 188-s, (June).

Weldability of High N, High Mn Austenitic Stainless Steel — J. A. Brooks, 189-s to 195-s, (June).
Weldability of Three Forms of Chemically Vapor Deposited Tungsten — W. A. Bryant and R. E. Gold, 405-s to 408-s, (Nov).
Weldability Studies on High Performance Alloys in Thin Sheet Form — S. J. Matthews, 281-s to 287-s, (Sept).
Weld Metal Implant Test Ranks Cr-Mo Hydrogen Cracking Resistance — P. H. M. Hart and E. Watkinson, 288-s to 295-s, (Sept).
Weld Metal, Joint Strength of Heavy Plates with Lower Strength — K. Satoh and M. Toyoda, 311-s to 319-s, (Sept).
Weld Metal Notch Toughness, Influence of Chemical Composition on Mild Steel — G. den Ouden, J. G. Verhagen and G. W. Tichelaar 87-s to 94-s, (Mar).
Weld Thermal Efficiency of the GTAW Process — R. W. Niles and C. E. Jackson, 25-s to 32-s, (Jan).
Welding of an Advanced High Strength Titanium Alloy — M. A. Greenfield and D. S. Duvall, 73-s to 80-s, (Mar).
Welding Theories, A New Diagram for the Application of — G. H. Harth and W. C. Leslie, 124-s to 128-s, (Apr).
Welds, Effect of Boron Content on Carbon Steel — J. H. Devletian and R. W. Heine, 45-s to 53-s, (Feb).
Welds in Low Carbon Mn-Mo-Cb Line Pipe Steels, Properties of — J. M. Sawhill, Jr. and T. Wada, 1-s to 11-s, (Jan).
Wetting, Influence of Flux, Substrate and Solder Composition on Solder — J. F. Shipley, 357-s to 362-s, (Oct).

Part 2 — AUTHOR INDEX

Addison, Jr., H. J. and Schillinger, D. E. — Relationships Among Brazing Defects and Brazing Conditions, 321-s to 329-s, (Oct).
Amato, I., Cappelli, P. G. and Fenoglio, G. — Brazing of Stainless Steel Heat Exchangers for Gas Turbine Applications, 338-s to 343-s, (Oct).
Ashton, R. F., Wesley, R. P. and Dixon, C. R. — The Effect of Porosity on 5086-H116 Aluminum Alloy Welds, 95-s to 98-s, (Mar).

Bader, W. G. — Lead Alloys for High Temperature Soldering of Magnet Wire, 370-s to 376-s, (Oct).
Bangs, E. R. and Beal, R. E. — Effect of Low Frequency Thermal Cycling on the Crack Susceptibility of Soldered Joints, 377-s to 383-s, (Oct).
Beal, R. E. and Bangs, E. R. — Effect of Low Frequency Thermal Cycling on the Crack Susceptibility of Soldered Joints, 377-s to 383-s, (Oct).
Belkin, E. and Nagata, P. K. — Hydrogen Embrittlement of Tough Pitch Copper by Brazing, 54-s to 62-s, (Feb).
Bibby, M. J., Goldak, J. A. and Burbidge, G. — Cracking in Restrained EB Welds in Carbon and Low Alloy Steels, 253-s to 258-s, (Aug).

Brinkman, C. R., Canonico, D. A. and King, R. T. — Elevated Temperature Weldment Behavior as Related to Nuclear Design Criteria, 265-s to 275-s, (Aug).
Brooks, J. A. — Weldability of High N, High Mn Austenitic Stainless Steel, 189-s to 195-s, (June).
Brous, J. — Evaluation of Post-Solder Flux Removal, 444-s to 448-s, (Dec).
Brown, R. T. and Masubuchi, K. — Fundamental Research on Underwater Welding, 178-s to 188-s, (June).
Bryant, W. A. — A Method for Specifying Hot Isostatic Pressure Welding Parameters, 433-s to 435-s, (Dec).
Bryant, W. A. and Gold, R. E. — Weldability of Three Forms of Chemically Vapor Deposited Tungsten, 405-s to 408-s, (Nov).
Buchanan, R. A. and Young, D. M. — Effects of Porosity on Elevated Temperature Fatigue Properties of 2-1/4Cr-1Mo Steel Weldments, 296-s to 301-s, (Sept).
Burbidge, G., Goldak, J. A. and Bibby, M. J. — Cracking in Restrained EB Welds in Carbon and Low Alloy Steels, 253-s to 258-s, (Aug).

Campbell, W. P. — Effect of Aluminum of HAZ Cold Cracking in C-Mn Steels, 154-s to 161-s, (May).
Canonico, D. A., King, R. T. and Brinkman, C. R. — Elevated Temperature Weldment Behavior as Related to Nuclear Design Criteria, 265-s to 275-s, (Aug).
Cappelli, P. G., Fenoglio, G. and Amato, I. — Brazing of Stainless Steel Heat Exchangers for Gas Turbine Applications, 338-s to 343-s, (Oct).
Chu, T. Y. — A Hydrostatic Model of Solder Fillets, 16-s to 24-s, (Jan).

Delong, W. T., Lundin, C. D. and Spond, D. F. — Ferrite-Fissuring Relationship in Austenitic Stainless Steel Weld Metals, 241-s to 246-s, (Aug).
den Ouden, G., Verhagen, J. G. and Tichelaar, G. W. — Influence of Chemical Composition on Mild Steel Weld Metal Notch Toughness, 87-s to 94-s, (Mar).
Devletian, J. H. and Heine, R. W. — Effect of Boron Content on Carbon Steel Welds, 45-s to 53-s, (Feb).
Dixon, C. R., Ashton, R. F. and Wesley, R. P. — The Effect of Porosity on 5086-H116 Aluminum Alloy Welds, 95-s to 98-s, (Mar).
Duvall, D. S. and Greenfield, M. A. — Welding of an Advanced High Strength Titanium Alloy, 73-s to 80-s, (Mar).

El-Sabbagh, A. A. S. and Shawki, G. S. A. — Shear Strength of Brazed and Soldered Joints, 276-s to 279-s, (Aug).
El-Soudani, S. M. and Pelloux, R. M. — Anisotropy of Fatigue Crack Propagation in Aluminum Alloy Butt Welded Joints, 144-s to 152-s, (May).

Fearnehough, G. D. and Lumb, R. H. — Toward Better Standards for Field Welding of Gas Pipelines, 63-s to 71-s, (Feb).
Fenoglio, G., Amato, I. and Cappelli, P. G. — Brazing of Stainless Steel Heat Exchangers for Gas Turbine Applications, 338-s to 343-s, (Oct).
Ferrera, K. P. and Olson, D. L. — Performance of the MnO-SiO_2-CaO System as a Welding Flux, 211-s to 215-s, (July).
Fink, J. H. — Analysis of Atmospheric Electron Beam Welding, 137-s to 143-s, 152-s to 153-s, (May).
Fisher, R. W. and Zanner, F. J. — Diffusion Welding of Commercial Bronze to a Titanium Alloy, 105-s to 112-s, (Apr).
Friedman, E., Yeniscavich, W. and Glickstein, S. S. — Investigation of Alloy 600 Welding Parameters, 113-s to 122-s, (Apr). (See p 233-s July issue for corrections).

Glickstein, S. S., Friedman, E. and Yeniscavich, W. — Investigation of Alloy 600 Welding Parameters, 113-s to 122-s, (Apr). (See p 233-s July issue for corrections).
Gold, R. E. and Bryant, W. A. — Weldability of Three Forms of Chemically Vapor Deposited Tungsten, 405-s to 408-s, (Nov).
Goldak, J. A., Bibby, M. J. and Burbidge, G. — Cracking in Restrained EB Welds in Carbon and Low Alloy Steels, 253-s to 258-s, (Aug).
Greenfield, M. A. and Duvall, D. S. — Welding of an Advanced High Strength Titanium Alloy, 73-s to 80-s, (Mar).

Hannerz, N. E. — Effect of Cb on HAZ Ductility in Constructional HT Steels, 162-s to 168-s, (May).
Hart, P. H. M. and Watkinson, E. — Weld Metal Implant Test Ranks Cr-Mo Hydrogen Cracking Resistance, 288-s to 295-s, (Sept).
Harth, G. H. and Leslie, W. C. — A New Diagram for the Application of Welding Theories, 124-s to 128-s, (Apr).
Heile, R. F. and Hill, D. C. — Particulate Fume Generation in Arc Welding Processes, 201-s to 210-s, (July).
Heine, R. W. and Devletian, J. H. — Effect of Boron Content on Carbon Steel Welds, 45-s to 53-s, (Feb).
Hibbert, P. D. and Paley, Z. — Computation of Temperatures in Actual Weld Designs, 385-s to 392-s, (Nov).
Hill, D. C. and Heile, R. F. — Particulate Fume Generation in Arc Welding Processes, 201-s to 210-s, (July).

Jackson, C. E. and Niles, R. W. — Weld Thermal Efficiency of the GTAW Process, 25-s to 32-s, (Jan).

Kenyon, N., Redfern, G. A. and Richardson, R. R. — Electroslag Welding of High Nickel Alloys, 235-s to 239-s, (July).
King, R. T., Canonico, D. A. and Brinkman, C. R. — Elevated Temperature Weldment Behavior as Related to Nuclear Design Criteria, 265-s to 275-s, (Aug).
Klarstrom, D. L., Rasmussen, J. F. and Weiss, S. — Mechanisms of Spreading and Oxide Displacement by BCup-2 Brazing Filler Metal, 330-s to 337-s, (Oct).
Kobayashi, M. — Reliability of Soldered Connections in Single Ended Circuit Components, 363-s to 369-s, (Oct).

Lee, J. W. — Repair of Rotating Air-Sealing Components for Gas Turbine Engines, 409-s to 415-s, (Nov).
Leslie, W. C. and Harth, G. H. — A New Diagram for the Application of Welding Theories, 124-s to 128-s, (Apr).
Lumb, R. H. and Fearnehough, G. D. — Toward Better Standards for Field Welding of Gas Pipelines, 63-s to 71-s, (Feb).
Lundin, C. D., Delong, W. T. and Spond, D. F. — Ferrite-Fissuring Relationship in Austenitic Stainless Steel Weld Metals, 241-s to 246-s, (Aug).

Masubuchi, K. and Brown, R. T. — Fundamental Research on Underwater Welding, 178-s to 188-s, (June).
Matthews, S. J. — Weldability Studies on High Performance Alloys in Thin Sheet Form, 281-s to 287-s, (Sept).
Metcalfe, J. C. and Quigley, M. B. C. — Heat Transfer in Plasma-Arc Welding, 99-s to 103-s, (Mar).
Metcalfe, J. C. and Quigley, M. B. C. — Keyhole Stability in Plasma Arc Welding, 401-s to 404-s, (Nov).
Mohamed, H. A. and Washburn, J. — Mechanism of Solid State Pressure Welding, 302-s to 310-s, (Sept).

Nagata, P. K. and Belkin, E. — Hydrogen Embrittlement of Tough Pitch Copper by Brazing, 54-s to 62-s, (Feb).

Nichols, R. W. — 1975 Adams Lecture: The Uses of Welded Materials in Nuclear Power Engineering, 417-s to 432-s, (Dec).
Niles, R. W. and Jackson, C. E. — Weld Thermal Efficiency of the GTAW Process, 25-s to 32-s, (Jan).

Olson, D. L. and Ferrera, K. P. — Performance of the MnO-SiO_2-CaO System as a Welding Flux 211-s to 215-s, (July).

Paley, Z. and Hibbert, P. D. — Computation of Temperatures in Actual Weld Designs, 385-s to 392-s, (Nov).
Patchett, B. M. and Smith, E. — Effects of Notch Acuity and Side Grooving on Fracture Toughness, Part I — Impact Loading, 169-s to 177-s, (June).
Patchett, B. M. and Smith, E. — Effects of Notch Acuity and Side Grooving on Fracture Toughness, Part II — Slow Bend, 226-s to 233-s, (July).
Pelloux, R. M. and El-Soudani, S. M. — Anisotropy of Fatigue Crack Propagation in Aluminum Alloy Butt Welded Joints, 144-s to 152-s, (May).
Pense, A. E. and Stout, R. D. — Elevated Temperature Fatigue of Pressure Vessel Steels, 247-s to 252-s, (Aug).

Quigley, M. B. C. and Metcalfe, J. C. — Heat Transfer in Plasma-Arc Welding, 99-s to 103-s, (Mar).
Quigley, M. B. C. and Metcalfe, J. C. — Keyhole Stability in Plasma Arc Welding, 401-s to 404-s, (Nov).

Rasmussen, J. F., Klarstrom, D. L. and Weiss, S. — Mechanisms of Spreading and Oxide Displacement by BCuP-2 Brazing Filler Metal, 330-s to 337-s, (Oct).
Reddy, G. P. and Shirwaikar, C. V. — Purging with Nitrogen in the Welding of Austenitic Steel, 12-s to 15-s, (Jan).
Redfern, G. A., Kenyon, N. and Richardson, R. R. — Electroslag Welding of High Nickel Alloys, 235-s to 239-s, (July).
Richardson, R. R., Kenyon, N. and Redfern, G. A. — Electroslag Welding of High Nickel Alloys, 235-s to 239-s, (July).

Satoh, K. and Toyoda, M. — Joint Strength of Heavy Plates with Lower Strength Weld Metal, 311-s to 319-s, (Sept).
Sawhill, J. M., Jr. and Wada, T. — Properties of Welds in Low Carbon Mn-Mo-Cb Line Pipe Steels, 1-s to 11-s, (Jan).
Schillinger, D. E. and Addison, H. J., Jr. — Relationships Among Brazing Defects and Brazing Conditions, 321-s to 329-s, (Oct).
Seifert, K., Staskewitsch, E. S., Weiss, B. Z. and Steffens, H. D. — Dynamic Fracture Instability in Welded 17-7PH Type Steel, 216-s to 225-s, (July).
Shaw, C. B., Jr. — Diagnostic Studies of the GTAW Arc Part I — Observational Studies, 33-s to 44-s, (Feb).
Shaw, C. B., Jr. — Diagnostic Studies of the GTAW Arc, Part 2 — Mathematical Model, 81-s to 86-s, (Mar).
Shawki, G. S. A. and El-Sabbagh, A. A. S. — Shear Strength of Brazed and Soldered Joints, 276-s to 279-s, (Aug).
Shipley, J. F. — Influence of Flux, Substrate and Solder Composition on Solder Wetting, 357-s to 362-s, (Oct).
Shirwaikar, C. V. and Reddy, G. P. — Purging with Nitrogen in the Welding of Austenitic Stainless Steel, 12-s to 15-s, (Jan).
Smith, E. and Patchett, B. M. — Effects of Notch Acuity and Side Grooving on Fracture Toughness, Part I — Impact Loading, 169-s to 177-s, (June).
Smith, E. and Patchett, B. M. — Effects of Notch Acuity and Side Grooving on Fracture Toughness, Part II — Slow Bend, 226-s to 233-s, (July).
Spaeder, G. J. — Effect of Sulfur on Through-Thickness Properties of C-Mn Steel Plates, 196-s to 200-s, (June).
Spond, D. F., Lundin, C. D. and DeLong, W. T. — Ferrite-Fissuring Relationship in Austenitic Stainless Steel Weld Metals, 241-s to 246-s, (Aug).
Staskewitsch, E. S., Weiss, B. Z., Steffens, H. D. and Seifert, K. — Dynamic Fracture Instability in Welded 17-7PH Type Steel, 216-s to 225-s, (July).
Steffens, H. D., Seifert, K., Staskewitsch, E. S. and Weiss, B. Z. — Dynamic Fracture Instability in Welded 17-7PH Type Steel, 216-s to 225-s, (July).
Steichen, J. M. and Ward, A. L. — High Strain Rate Tensile Properties of Type 308 SMA Weld Metal, 130-s to 135-s, (Apr).
Stout, R. D. and Pense, A. E. — Elevated Temperature Fatigue of Pressure Vessel Steels, 247-s to 252-s, (Aug).

Tichelaar, G. W., den Ouden, G. and Verhagen, J. G. — Influence of Chemical Composition on Mild Steel Weld Metal Notch Toughness, 87-s to 94-s, (Mar).
Toyoda, M. and Satoh, K., — Joint Strength of Heavy Plates with Lower Strength Weld Metal, 311-s to 319-s, (Sept).
Toyooka, T. and Watanabe, M. — Embrittlement in Weld Strain-Affected Zone in Carbon Steel, 393-s to 400-s, (Nov).

Verhagen, J. G., Tichelaar, G. W. and den Ouden, G. — Influence of Chemical Composition on Mild Steel Weld Metal Notch Toughness, 87-s to 94-s, (Mar).

Wada, T. and Sawhill, J. M., Jr. — Properties of Welds in Low Carbon Mn-Mo-Cb Line Pipe Steels, 1-s to 11-s, (Jan).
Ward, A. L. — Irradiation Effects of Mechanical Properties of an SMAW Deposited Type 308 Stainless Steel, 259-s to 264-s, (Aug).
Ward, A. L. and Steichen, J. M. — High Strain Rate Properties of Type 308 SMA Weld Metal, 130-s to 135-s, (Apr).
Washburn, J. and Mohamed, H. A. — Mechanism of Solid State Pressure Welding, 302-s to 310-s, (Sept).
Watanabe, M. and Toyooka, T. — Embrittlement in Weld Strain-Affected Zone in Carbon Steel, 393-s to 400-s, (Nov).
Watkinson, E. and Hart, P. H. M. — Weld Metal Implant Test Ranks Cr-Mo Hydrogen Cracking Resistance, 288-s to 295-s, (Sept).
Weiss, B. Z., Steffens, H. D., Seifert, K. and Staskewitsch, E. S. — Dynamic Fracture Instability in Welded 17-7PH Type Steel, 216-s to 225-s, (July).
Weiss, S., Rasmussen, J. F. and Klarstrom, D. L. — Mechanisms of Spreading and Oxide Displacement by BCuP-2 Brazing Filler Metal, 330-s to 337-s, (Oct).
Wesley, R. P., Dixon, C. R. and Ashton, R. F. — The Effect of Porosity on 5086-H116 Aluminum Alloy Welds, 95-s to 98-s, (Mar).
Wielage, B., Hartman, K.-H. and Draugelates, U. — Cracking Susceptibility and Microstructure of Ni-Cr20-Ti-Al Brazed Joints, 344-s to 346-s, (Oct).
Wu, K. C. — Resistance Spot Welding of High Contact-Resistance Surfaces for Weldbonding, 436-s to 443-s, (Dec).

Yeniscavich, W., Glickstein, S. S. and Friedman, E. — Investigation of Alloy 600 Welding Parameters, 113-s to 122-s, (Apr). (See p 233-s July issue for corrections).
Young, D. M. and Buchanan, R. A. — Effects of Porosity on Elevated Temperature Fatigue Properties of 2-1/4Cr-1MO Steel Weldments, 296-s to 301-s, (Sept).

Zanner, F. J. and Fisher, R. W. — Diffusion Welding of Commercial Bronze to a Titanium Alloy, 105-s to 112-s, (Apr).